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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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YU, GINA C

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 06/04/2003

21

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/692,749

Applicant(s)

DECOSTER ET AL.

Examiner

Gina C. Yu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-112 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-112 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

Receipt is acknowledged of Amendment filed on March 10, 2003. Claims 1-112 are pending. The claim rejections under 35 U.S.C. § 103 as indicated in the previous Office action dated September 10, 2002 are modified to meet the new claims, but otherwise maintained for the reasons of record. The obviousness double patenting rejection indicated in the previous Office action is maintained for the reasons of record.

#### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(A) Claims 1-31, 38 – 67, and 94-112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalle et al. (EP 0874017 A2) ("Dalle") in view of Dubief et al. (U.S. Pat. No. 5,650,383) ("Dubief ('383)") and Restle et al. (U.S. Pat. No. 6,039,936) ("Restle").

Dalle teaches silicone- in- water emulsions comprising the polysiloxanes of formula (I) and at least one surfactant among anionic, nonionic, amphoteric, and cationic surfactants. The use of the emulsion in hair or skin washing of treatment applications is also disclosed. See p. 5, lines 47 – 57; instant claims 96-108. The reference teaches using 9 parts by weight of polysiloxane in making the silicone-in-water emulsion. See Examples 1-3 on p. 6; instant claims 13 and 14. Examiner views that the dimethylvinylsiloxy terminated polydimethylsiloxanes used in Examples 1-3 meets instant claim 110. The particle size of the silicone copolymer is said to be in the range of 0.3 – 100  $\mu\text{m}$ . See p. 5, lines 35-41. See instant claims 15-16. Formulating

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the composition with additives including perfume, polymers and moisturizing agents is disclosed. See p. 4, line 57- p. 5, line 1; p. 6, lines 2- 4; instant claim 94. Dalle et al. teaches the use of quaternary ammonium hydroxides and their corresponding salts in formulating the silicone-in-water emulsion. See p. 4, lines 26 – 37; instant claims 41-67. The reference teaches that the invention is applicable either in hair shampoo or conditioning composition. See p. 5, lines 51-52. See instant claims 111 and 112.

Dalle fails to teach using the additional silicone described in the instant claims 15-40.

Dubief ('383) teaches composition for washing and rinsing hair, which comprise water-insoluble silicone in an aqueous medium and surfactants. The polyorganosiloxanes in claims 15 – 31 and 38 are disclosed in col. 2, line 66 – col. 6, line 8. polydimethylsiloxanes are particularly mentioned. See col. 3, lines 46 –61; instant claim 109. The use of the silicone in the amount of 0.1 – 30% by weight is also disclosed, which meets claims 39 and 40, col. 6 lines 5 – 9. The reference teaches that using silicones in hair washing composition is well known. See col. 1, lines 21-24. Silicones are said to provide shine, softness, and lightness on hair.

Restle et al. teach an oil-in-water emulsion comprising a silicone surfactant and at least one cationic amphiphilic lipid that is a quaternary ammonium salt of formulas (IV) – (VII) and their constituents in the instant claims 41 - 67. See col. 2, line 59 –col. 6, line 38. Using 1-60% of the cationic amphiphilic lipids by weight is also disclosed, which meets claims 65 – 67. See col. 6, lines 42 – 50. The reference teaches that the

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composition, when used in hair treatment products, renders the hair softness and gloss without a greasy feel or appearance, and disentangles easily. See col. 1, lines 24 – 48.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of Dalle by adding an additional silicone disclosed in Dubief, as motivated by the teaching therein, because of the expectation to have successfully produced hair care composition that enhances shine, softness, lightness and disentanglement of hair. It would also have been obvious to the skilled artisan to have added the quaternary ammonium salt, as motivated by Restle et al., because of the expectation to have successfully produced a hair care composition which leaves the hair soft and gloss with no greasy feel or appearances and disentangles the hair easily.

All components are known in the art. Nothing unexpected or nonobvious is seen in combining old and well-known compounds for the same use.

(B) Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dalle, Dubief ('383), and Restle, as applied to claims 1-31, 38-67, 94-112 above, and further in view of Grollier et al. (U.S. Pat. No. 5,063,051) ("Grollier").

Dalle, Dubief ('383), and Grollier are discussed above. The combined references fail to teach the polysiloxanes in claim 32.

Grollier et al. ('051) disclose a cosmetic hair treatment composition comprising a polyorganosiloxane containing a hydroalkyl functional group of formula (IX) of the instant claim 32 and its constituents. See abstract. The reference teaches that the

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composition, in its application on hair, enhances shine, lightness, and volume. See col. 1, lines 22 – 26.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the combined references by adding the polyorganosiloxane of formula (IX), as motivated by Grollier, because of the expectation to have successfully produced a hair treatment composition that provides shine, lightness, and volume to the hair.

(C) Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dalle, Dubief, Restle, and Grollier ('051) as applied to claims 1-32, 38-67, 94-112 above, and further in view of Grollier et al. (U.S. Pat. No. 4,957,732) ("Grollier ('732)").

Dalle, Dubief ('383), Restle, and Grollier ('051) are discussed above. The combined references lack the teaching of using the polyorganosiloxane of claim 33.

Grollier ('732) describe shaving composition comprising polyorgano-siloxane of formula (X) and in claim 33 and its constituents. See col. 1, line 54 – col. 2, line 25. The reference teaches that the use of the polyorganosiloxanes in the invention exhibited substantial improvement to be obtained in the smoothness and softness of these compositions, preserves the quality and stability of the composition while emptying from aerosol container, and easy rinsing of hair with water, and leaving skin clean and satiny. See col. 1, lines 28 – 45.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the combined references by adding the polyorganosiloxane disclosed in Grollier ('732), as motivated by Grollier

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('732), because of the expectation to have successfully produced an aerosol hair care or shaving composition that is smooth in feel and easy to rinse, retains the quality and stability while being dispensed from the container, and leaves the skin clean and satiny.

(D) Claim 34 - 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalle, Dubief ('383), Restle, Grollier ('051), and ('732) as applied to claims 1-33, 38-67, and 94-112 above, and further in view of Dubief et al. (U.S. Pat. No. 6,011,126) ("Dubief ('126)").

Dalle, Dubief ('383), Restle, Grollier ('051), and ('732), discussed above, fail to teach the grafted polymer of instant claims 34-37.

Dubief ('126) discloses a cosmetic composition for hair treatment, which comprises a polymer grafted with a non-silicone organic skeleton grafted with polysiloxane monomers, or polysiloxane polymer grafted with non-silicone organic monomers, which meets claims 34 and 35. See abstract. The polysiloxane macromers of formula (X) in the instant claim 36 are disclosed in col. 4, lines 16 – 33. Claim 37 is rejected by the disclosure in col. 6, line 66 – col. 7, line 8. The reference teaches that the use of these polymers in hair product enhances the styling properties, col. 1, lines 30 - 40.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the combined references by adding the grafted polysiloxane polymer in Dubief ('126), as motivated by the teaching therein, because of the expectation to have successfully produced a hair care composition with enhanced hair styling properties.

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(E) Claims 68-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalle, Restle, Dubief ('383), ('126), Grollier ('051), and ('732), as applied to claims 1-67 and 94-112 above, and further in view of Inman (U.S. Pat. No. 5,948,739).

Dalle, Restle, Dubief ('383), ('126), Grollier ('051), and ('732) are discussed above. While Dubief ('383) teaches to use the deterative surface-active agents of instant claims, the combined references do not provide combining the surface-active agents.

Inman teaches aqueous hair conditioning shampoo compositions that contain silicone conditioning agent and a deterative surfactant component, which is a combination of anionic surfactant and amphoteric, zwitterionic, or other non-ionic surfactants. See col. 2, lines 31 – 61; col. 3, lines 1 – 17. The anionic surfactants of instant claims 68 – 79 are disclosed in col. 4, line 11 – col. 6, line 14. The nonionic surfactants of claims 70-83 are described in col. 6, line 14 - col. 8, line 44. The amphoteric surfactants of claims 84 – 88 and 91 – 93 are described in col. 8, line 46 - col. 11, line 20. Claims 89 – 91 are met by the disclosure in col. 11, lines 21 – 28.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the combined references by adding the surfactants as taught by Inman because of the expectation to have successfully produced a hair conditioning shampoo composition with a good cleaning property.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11



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F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-14 and 41-104 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-83 of copending application no. 09/692360; claims 1-95 of copending application no. 09/692155; claims 1-16, 37-104 of copending application no. 09/692716. Although the conflicting claims are not identical, they are not patentably distinct from each other because each set of claims is directed to hair care composition comprising silicone copolymers, cationic surfactants, and additional surfactants of identical formulas.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments filed on March 10, 2003 have been fully considered but they are not persuasive.

Applicants argue that the rejections lack motivation to combine or modify. Specifically, applicants, argue that the Dalle inventions are silicone emulsions varying in viscosity and form. In response, examiner notes that the reference on page 5, lines 39-41 teaches that the viscosities of the silicone in the emulsion is in the range of  $10^6$  to

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$10^8$  mm<sup>2</sup>/sec. The dynamic viscosity of the silicone copolymer would depend on the density of the emulsion, and examiner asserts that given the disclosure of the reference applicants have burden to show that the recited viscosity is in a nonobvious or unexpected range for the prior art silicone emulsion.

Applicants also argue that there is no motivation to combine the Dalle silicone emulsion with an additional silicone and a cationic surfactant. Examiner notes that both of the Dalle and Dubief inventions are applicable to personal care compositions, particularly hair washing and/or conditioning compositions. Dalle suggests adding conventional ingredients well known in personal care products. See p. 5, line 47 – p. 6, line 4.

Dubief also teaches that cationic surfactants or additional silicones may be added in the invention. See col. 7, lines 56 – 67. Examiner reiterates that the combination would have been obvious in view of the expected additive effects. Also it is generally considered prima facie obvious to combine two compounds each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is to be used for the very same purpose. The idea for combining them flows logically from their having been used individually in the prior art. In re Kerkhoven, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980). As shown by the recited teachings, the instant claims define nothing more than the concomitant use of conventional components well known in hair washing and/or conditioning art. It would follow that the recited claims define prima facie obvious subject matter.

Applicants also argue that Dubief and Restle teach away from each other, allegedly because Dubief teaches an amphoteric polymer whereas Restle teaches a

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nanoemulsion based on non-ionic and cationic amphiphilic lipids. Examiner respectfully disagrees. There is no specific teaching against combining the prior arts nor is there any indication that combining the cationic surfactants in Restle would render the hair compositions of the Dalle/Dubief references unsatisfactory. See MPEP § 2145(X)(D). Both Dubief and Restle inventions are hair washing/conditioning arts, and in examiner's view combining the teachings to produce an enhanced product would have been obvious.

Applicants further argue that the rejections fail to provide reasonable expectation of success. Examiner notes that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Applicants' arguments that the references teach "in different directions with respect to maintaining a cationic surfactant in developing a successful conditioning composition." Examiner notes that the compositions in claims 1-110 read on any composition or hair products other than rinse-out composition. Also, examiner views that, although a cationic surfactant is not an absolute requirement in either Dalle or Dubief invention, the references suggest adding it and provide sufficient motivation for a routineer to combine the hair composition with the quaternary cationic surfactants.

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In response to applicant's argument that the examiner's conclusion of obviousness is reached by an "obvious to try" analysis, and inaccurate. Examiner notes that "obvious to try" type of error would be found in cases where (i) rejections are based on varying all parameters or trying each of numerous possible choices until arriving at a successful result while prior art gives no criticality or direction as to a specific parameter or choice; or (ii) rejections are based on exploring new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it. See MPEP 2145 (X)(B), quoting *In re O'Farrell*, 853 F. 2d 894, 903, 7 U.S.P.Q. 2d 1673, 1681 (Fed. Cir. 1988). In this case, however, the obviousness rejection is based on the notion that it would have been obvious to combine well-known hair washing/conditioning components to produce an improved hair composition with additive effects. Examiner maintains the position that the references provide sufficient motivation to combine and modify the prior arts to produce the claimed invention.

### ***Conclusion***

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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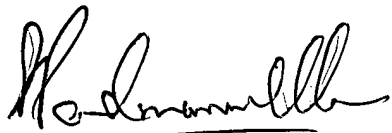
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gina C. Yu whose telephone number is 703-308-3951.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 703-305-1877. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Gina C. Yu  
Patent Examiner  
May 27, 2003

  
SREENI PADMANABHAN  
PRIMARY EXAMINER  
6/1/03